Attorney's Docket No.: 14848-010US1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Spincant: Samuel J. Shuster et al.

Art Unit : 1635

Serial No.: 10/537,741

Examiner: Unknown

Filed

: April 24, 2006

Conf. No. : 3556

Title

: METHODS AND MATERIALS FOR MODULATING TRPM2

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

- 1. Information Disclosure Statement (1 page);
- 2. Form PTO-1449 (4 pages);
- 3. Copies of cited references (33 references); and
- 4. A return postcard.

Please date stamp and return the enclosed postcard. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: November 21, 2006

M. Angela Parsons, Ph.D.

Reg. No. 44,282

Fish & Richardson P.C. 60 South Sixth Street, Suite 3300 Minneapolis, MN 55402 (612) 335-5070 telephone (612) 288-9696 facsimile

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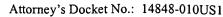
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INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. §1.98(a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

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Date: November 21, 2006

Respectfully submitted,

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(Modified)

Information Disclosure Statement

Department of Commerce atent and Trademark Office

Attorney's Docket No. 14848-010US1

Application No. 10/537,741

by Applicant (Use several sheets if necessary)

Applicant Samuel J. Shuster et al.

Filing Date

Group Art Unit

(37 CFR §1.98(b))

April 24, 2006

1635

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3,687,808	08/29/72	Merigan, Jr. et al.	·	_	
	AB	4,469,863	09/04/84	Ts'o et al.			
	AC	4,736,866	04/12/88	Leder et al.			
	AD	4,981,957	01/01/91	Lebleu et al.			
	AE	5,214,136	05/25/93	Lin et al.			
	AF	5,218,105	06/08/93	Cook et al.			
	AG	5,223,409	06/29/93	Ladner et al.		-	
	AH	5,235,033	08/10/93	Summerton et al.			
	AI	5,254,678	10/19/93	Haseloff et al.			
	AJ	5,359,044	10/25/94	Cook et al.			
·= · ·	AK	5,489,677	02/06/96	Sanghvi et al.			
	AL	5,496,698	03/05/96	Draper et al.			•
	AM	5,525,468	06/11/96	McSwiggen			
	AN	5,539,082	07/23/96	Nielsen et al.			
	AO	5,545,729	08/13/96	Goodchild et al.			
	AP	5,596,086	01/21/97	Matteucci et al.			
	AQ	5,602,240	02/11/97	De Mesmaeker et al.			
	AR	5,614,617	03/25/97	Cook et al.			
-,	AS	5,616,459	04/01/97	Kramer et al.			
	AT	5,631,115	05/20/97	Ohtsuka et al.		,	
	AU	5,631,359	05/20/97	Chowrira et al.			
	AV	5,646,020	07/08/97	Swiggen et al.			
	AW	5,650,502	07/22/97	Goodchild et al.			
	AX	5,652,094	07/29/97	Usman et al.			
<u> </u>	AY	5,672,511	09/30/97	Beigelman et al.			
	AZ	5,750,666	05/12/98	Caruthers et al.			
	AAA	5,767,263	06/16/98	Usman et al.			
	ABB	5,837,855	11/17/98	Chowrira et al.			

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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

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Application No. Attorney's Docket No. 10/537,741 14848-010US1

Substitute Form PTO-1449 U.S. Department of Patter and Trade

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant Samuel J. Shuster et al.

Filing Date

April 24, 2006

Group Art Unit 1635

(37 CFR §1.98(b))

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ACC	5,874,414	02/23/99	Haseloff et al.			
	ADD	5,879,938	03/09/99	Usman et al.			
	AEE	5,891,684	04/06/99	Usman et al.			
	AFF	5,908,779	06/01/99	Carmichael et al.		,	
	AGG	5,942,395	08/24/99	Fournier et al.			
	АНН	5,994,124	11/30/99	Bozzoni			
	AII	6,015,794	01/18/00	Haseloff et al.			
٠,	AJJ	6,022,962	02/08/00	Chowrira et al.			
	AKK	6,096,715	08/01/00	Rossi et al.			
	ALL	6,140,491	10/31/00	Usman et al.			
	AMM	6,156,192	12/05/00	Rummler			
	ANN	6,204,027	03/20/01	Goodchild			
	AOO	6,265,167	07/24/01	Carmichael et al.			
	APP	6,271,436	08/07/01	Piedrahita et al.			
	AQQ	6,307,041	10/23/01	Ruffner et al.			
	ARR	2002/0081658	06/27/02	Curtis			

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	l ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	ASS	PCT/SE01/02 054	Unknown	WIPO				

	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Desig. ID	Document			
	ATT	Bennett, "Animal Models of Pain," Methods in Pain Research, 2001, Kruger (ed.), pp. 67-91			
	AUU	Bilsky et al., "Characterization of Antinociception to Opioid Receptor Selective Agonists after Antisense Oligodeoxynucleotide-Mediated "Knock-Down" of Opioid Receptors in Vivo," J. Pharmacol. Exp. Ther., 1996, 277:491-501			
	AVV	Bilsky et al., "Selective blockade of peripheral delta opioid agonist induced antinociception by intrathecal administration of delta receptor antisense oligodeoxynucleotide," Neurosci. Lett., 1996, 220:155-158			

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Substitute Disclosure Form (PTO-1449)

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	artment of Commerce and Trademark Office Attorney's Docket N	1	
Information Disclosure State by Applicant	tement Applicant Samuel J. Shu	Applicant Samuel J. Shuster et al.	
(Use several sheets if necessar	Filing Date April 24, 2006	Group Art Unit 1635	

	Other Do	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	Document
Initial	AWW	Carell et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules," Angew. Chem. Int. Ed. Engl., 1994, 33(20):2061-2064
	AXX	Carell et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules," Angew. Chem. Int. Ed. Engl., 1994, 33:2059-2061
	AYY	Chaplan et al., "Quantitative assessment of tactile allodynia in the rat paw," J. Neurosci. Meth., 1994, 53:55-63
	AZZ	Cho et al., "An Unnatural Biopolymer," Science, 1993, 261:1303-1305
	AAAA	Cull et al., "Screening for receptor ligands using large libraries of peptides linked to the C terminus of the <i>lac</i> repressor," Proc. Natl. Acad. Sci. USA, 1992, 89:1865-1869
	ABBB	Cwirla et al., "Peptides on phage: A vast library of peptides for identifying ligands," <u>Proc. Natl.</u> Acad. Sci. USA, 1990, 87:6378-6382
	ACCC	Devlin et al., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," Science, 1990, 249:404-406
	ADDD	DeWitt et al., ""Diversomers": An approach to nonpeptide, nonoligomeric chemical diversity," <u>Proc.</u> Natl. Acad. Sci. USA, 1993, 90:6909-6913
	AEEE	Erb et al., "Recursive deconvolution of combinatorial chemical libraries," <u>Proc. Natl. Acad. Sci. USA</u> , 1994, 91:11422-11426
	AFFF	Felici et al., "Selection of Antibody Ligands from a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector," <u>J. Mol. Biol.</u> , 1991, 222:301-310
	AGGG	Fodor et al., "Multiplexed biochemical assays with biological chips," Nature, 1993, 364:555-556
	АННН	Gallop et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries," J. Med. Chem., 1994, 37(9):1233-1251
	AIII	Hargreaves et al., "A new and sensitive method for measuring thermal nociception in cutaneous hyperalgesia," Pain, 1988, 32:77-88
	AJJJ	Harteneck et al., "From worm to man: three subfamilies of TRP channels," <u>Trends Neurosci.</u> , 2000, 23:159-166
	AKKK	Houghten et al., "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides," <u>Biotechniques</u> , 1992, 13(3):412-421
	ALLL	Hylden et al., "Expansion of receptive fields of spinal lamina I projection neurons in rats with unilateral adjuvant-induced inflammation: the contribution of dorsal horn mechanisms," Pain, 1989, 37:229-243
	AMMM	Kim and Chung, "An experimental model for peripheral neuropathy produced by segmental spinal nerve ligation in the rat," Pain, 1992, 50:355-363
	ANNN	Lam, "Application of combinatorial library methods in cancer research and drug discovery," Anti- Cancer Drug Des., 1997, 12:145-167
	A000	Lam et al., "A new type of synthetic peptide library for identifying ligand-binding activity," Nature, 1991, 354:82-84
	APPP	Montell et al., "A Unified Nomenclature for the Superfamily of TRP Cation Channels," Mol. Cell, 2002, 9:229-231
	AQQQ	Nagamine et al., "Molecular Cloning of a Novel Putative Ca ²⁺ Channel Protein (TRPC7) Highly Expressed in Brain," Genomics, 1998, 54:124-131

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	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14848-010US1	Application No. 10/537,741
6	Information Disclosure Statement by Applicant		Applicant Samuel J. Shuster et al.	
NO	(Use several sh	eets if necessary)	Filing Date April 24, 2006	Group Art Unit 1635
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TRADENA	Other Documents (include Author, Title, Date, and Place of Publication)					
xaminei	Desig.	Document				
<u>Initial</u>	ID_					
	ARRR	Nielsen et al., "Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide," Science, 1991, 254:1497-1500				
	ASSS	Perraud et al., "ADP-ribose gating of the calcium-permeable LTRPC2 channel revealed by Nudix motif homology," Nature, 2001, 411:595-599				
	ATTT	Ryazanov, "Elongation factor-2 kinase and its newly discovered relatives," <u>FEBS Lett.</u> , 2002, 514:26-29				
	AUUU	Crooke and Lebleu (eds.), "C-5 Substituted Bases," Antisense Research and Applications, 1993, CRC Press, Boca Raton, FL, pp. 276-278				
	AVVV	Sano et al., "Immunocyte Ca ²⁺ Influx System Mediated by LTRPC2," <u>Science</u> , 2001, 293:1327-1329				
	AWWW	Scott and Smith, "Searching for Peptide Ligands with an Epitope Library," Science, 1990, 249:386-390				
	AXXX	Vanderah et al., "Antisense oligodeoxynucleotide to the CCK _B receptor produces naltrindole- and [Leu ⁵]enkephalin antiserum-sensitive enhancement of morphine antinociception," NeuroReport, 1994, 5:2601-2605				
	AYYY	Zuckermann et al., "Discovery of Nanomolar Ligands for 7-Transmembrane of G-Protein-Coupled Receptors from a Diverse N-(Substituted)glycine Peptoid Library," J. Med Chem., 1994, 37:2678-2685				

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EXAMINER: Initials citation considered	Draw line through citation if no	t in conformance and not considered. Include copy of this form with

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